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CLAIMS:

1. A network device adapted to process a call between the network device and a first other network device, the network device comprising:

5 a user interface adapted to receive a user input requesting a call transfer to a second other network device; and

a call transfer function responsive to the user input to deliver call transfer functionality by, upon  
10 receipt of the user input:

a) initiating a connection from the network device to the second other network device; and

b) sending a first message to the first other network device containing a reference to the second  
15 other network device.

2. A network device according to claim 1 wherein the call transfer function is further adapted to, upon receipt of the input:

(c) send a second message to the first other  
20 network device to place the call on hold.

3. A network device according to claim 1 comprising a call processing module adapted to process the call, the call processing module comprising the call transfer function.

4. A network device according to claim 3 wherein the  
25 first message contains a reference to the connection.

5. A network device according to claim 2 wherein the call transfer function is adapted to send the second message

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after a user at the network device hangs up or presses a transfer key.

6. A network device according to claim 3 wherein the call processing module is adapted to terminate the call upon  
5 receiving a message from the first other network device, which represents that the first other network device has established a media path with the second other network device.

7. A network device according to claim 3 wherein the  
10 call processing module is adapted to send the first message before or after a media path is established with the second other network device.

8. A network device according to claim 5 wherein the first message is sent upon receipt of a response from the  
15 second other network device and wherein upon receipt of the response from the second network device, and prior to sending the first message to the first other network device containing a reference to the connection, the call processing module is adapted to establish a media path  
20 between the network device and the second other network device.

9. A network device according to claim 8 wherein the call processing module is adapted to send the first message to the first other network device upon a user input from a  
25 user at the network device hanging up or pressing a transfer key, the first message being sent before or after the media path between the network device and the second other network device is established.

10. A network device according to claim 3 wherein the  
30 call processing module is further adapted to process an

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other call from the network device to a first network device other than the network device;

the call processing module being further adapted to participate in a call transfer of the other call by:

5           a) responding to a message from the first network device to be placed on hold with a message accepting the hold;

          b) responding to a message from the first network device containing a reference to a second network device  
10 other than the network device and the first network device by sending a message to the second network device containing a reference to the first network device so as to initiate setting up a connection from the network device to the second network device.

15 11.       A network device according to claim 3 wherein the a call processing module is further adapted to participate in a call transfer of an other call from a first network device other than the network device to a second network device other than the network device and the first network  
20 device by:

          a) responding to a message from the second network device initiating a connection between the network device and the second network device by sending a message indicating that the connection has been initiated; and

25           b) responding to a message from the first network device containing a reference to the second network device by replacing the connection between the network device and the second network device with another connection between the network device and the first network device.

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12. A network device according to claim 1 wherein the network device is one of a telephone, a video phone, a PDA (Personal Digital Assistant), a soft phone, a wireless device, a wireless telephone, and a cell phone.

5 13. A network device according to claim 1 wherein the network device is a VoIP (Voice over Internet Protocol) telephone.

14. A network device adapted to process a call between the network device and a first other network device, the  
10 network device comprising:

a call transfer function adapted to participate in a call transfer of the call by:

responding to a first message from the first other network device containing a reference to a second other  
15 network device by establishing a media path with the second other network device.

15. A network device according to claim 14 wherein the call transfer function is further adapted to respond to a message from the first other network device for placing the  
20 call on hold with a message accepting the hold.

16. A network device according to claim 14 comprising a call processing module adapted to process the call, the call processing module comprising the call transfer function.

25 17. A network device according to claim 14 wherein to establish the media path the call transfer function is adapted to send a second message to the second other network device containing a reference to the first network device so as to initiate setting up a connection, wherein the first  
30 message and the second message contain a reference to a call

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between the first other network device and the second other network device.

18. A network device according to claim 16 wherein the call processing module is adapted to send a second message  
5 for terminating the call from the network device to the first other network device after establishing a media path with the second other network device.

19. A network device according to claim 16 wherein the call processing module is further adapted to re-establish a  
10 media path with the first other network device set if attempts to establish a media path with the second other network device set fail.

20. A network device according to claim 14 wherein the network device is one of a telephone, a video phone, a PDA  
15 (Personal Digital Assistant), a soft phone, a wireless device, a wireless telephone, a cell phone, and a TTI (Thin Trunk Interface).

21. A network device according to claim 14 wherein the network device is a VoIP (Voice over Internet Protocol)  
20 telephone.

22. A network device, comprising:

a call transfer function being adapted to participate in a call transfer of a call between a first other network device and a second other network device by:

25 after receiving a first message from the second other network device initiating a connection between the network device and the second other network device, responding to a second message from the first other network device containing a reference to the second other network  
30 device by replacing a connection between the network device

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and the second other network device with an other connection between the network device and the first other network device.

23. A network device according to claim 22 comprising  
5 a call processing module adapted to process the call, the call processing module comprising the call transfer function.

24. A network device according to claim 22 wherein the  
10 second message contains a reference to the connection between the network device and the second other network device.

25. A network device according to claim 22 wherein the network device is one of a telephone, a video phone, a PDA (Personal Digital Assistant), a soft phone, a wireless  
15 device, a wireless telephone, a cell phone, and a TTI (Thin Trunk Interface).

26. A network device according to claim 22 wherein the network device is a VoIP (Voice over Internet Protocol) telephone.

20 27. In a network, a system comprising:

a plurality network devices on the network, each network device of the plurality of network devices comprising:

a user interface adapted to receive a user input  
25 requesting a call transfer;

a call transfer function adapted to:

(i) participate in a call transfer of a first call between the network device and a first other network device

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using local call transfer functionality, the first call being transferred to a second other network device;

(ii) participate in a call transfer of a second call between the network device to and first other network device using local call transfer functionality, the second call being transferred to a second other network device; and

(iii) participate in a call transfer of a third call between a first other network device and a second other network device using local call transfer functionality, the third call being transferred to a network device.

28. A system according to claim 27 further comprising:

a TTI (Thin Trunk Interface) having a call transfer function adapted to provide local call transfer functionality as a transferee of a call for network devices external to the network.

29. A system according to claim 27 further comprising:

a TTI (Thin Trunk Interface) having a call transfer function adapted to provide local call transfer functionality as an originator of a call for network devices external to the network.

30. A system according to claim 27 wherein each network device is one of a telephone, a video phone, a PDA (Personal Digital Assistant), a soft phone, a wireless device, a wireless telephone, and a cell phone.

31. A system according to claim 27 wherein each network device is a VoIP (Voice over Internet Protocol) telephone.

32. An article of manufacture comprising:

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a computer usable medium having computer readable program code means embodied therein for providing call transfer functionality at a network device, the computer readable code means in said article of manufacture

5 comprising:

computer readable code means for processing a call between the network device and a first other network device;

computer readable code means for receiving a user input requesting a call transfer to a second other network  
10 device; and

computer readable code means for to delivering call transfer functionality in response to the user input by, upon receipt of the user input:

a) initiating a connection from the network  
15 device to the second other network device;

b) sending a first message to the first other network device containing a reference to the second other network device.

33. An article of manufacture according to claim 32  
20 wherein the computer readable code means in said article of manufacture comprise computer readable code means for:

upon receipt of the user input, sending a second message to the first other network device to place the call on hold.

25 34. An article of manufacture according to claim 32 wherein the first message contains a reference to the connection.

35. An article of manufacture according to claim 33 wherein the computer readable code means in said article of



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manufacture comprises computer readable code means for sending the second message after a user at the network device hangs up or presses a transfer key.

36. An article of manufacture according to claim 32 wherein the computer readable code means in said article of manufacture comprises computer readable code means for terminating the call upon receiving a message from the first other network device, which represents that the first other network device has established a media path with the second other network device.

37. An article of manufacture according to claim 32 wherein the computer readable code means in said article of manufacture comprises computer readable code means for sending the first message before or after a media path is established with the second other network device.

38. An article of manufacture according to claim 32 wherein the first message is sent upon receipt of a response from the second other network device and wherein the computer readable code means in said article of manufacture comprises computer readable code means for:

upon receipt of the response from the second network device and prior to sending the first message to the first other network device containing a reference to the connection, establishing a media path between the network device and the second other network device.

39. An article of manufacture according to claim 38 wherein the computer readable code means in said article of manufacture comprises computer readable code means for sending the first message to the first other network device upon a user input from a user at the network device hanging up or pressing a transfer key, the first message being sent

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before or after the media path between the network device and the second other network device is established.

40. An article of manufacture according to claim 32 wherein the computer readable code means in said article of  
5 manufacture comprises:

computer readable code means for processing an other call from the network device to a first network device other than the network device; and

computer readable code means for participating in  
10 a call transfer of the other call by:

a) responding to a message from the first network device to be placed on hold with a message accepting the hold;

b) responding to a message from the first network  
15 device containing a reference to a second network device other than the network device and the first network device by sending a message to the second network device containing a reference to the first network device so as to initiate setting up a connection from the network device to the  
20 second network device.

41. An article of manufacture according to claim 32 wherein the computer readable code means in said article of manufacture comprises computer readable code means for participating in a call transfer of an other call from a  
25 first network device other than the network device to a second network device other than the network device and the first network device by:

a) responding to a message from the second network device initiating a connection between the network device

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and the second network device by sending a message indicating that the connection has been initiated; and

b) responding to a message from the first network device containing a reference to the second network device by replacing the connection between the network device and the second network device with another connection between the network device and the first network device.

42. An article of manufacture according to claim 32 wherein the network device is one of a telephone, a video phone, a PDA (Personal Digital Assistant), a soft phone, a wireless device, a wireless telephone, and a cell phone

43. An article of manufacture according to claim 32 wherein the network device is a VoIP (Voice over Internet Protocol) telephone.

15 44. An article of manufacture comprising:

a computer usable medium having computer readable program code means embodied therein for providing call transfer functionality at a network device, the computer readable code means in said article of manufacture comprising:

computer readable code means for processing a call between the network device and a first other network device; and

computer readable code means for participating in a call transfer of the call by:

responding to a first message from the first other network device containing a reference to a second other network device by establishing a media path with the second other network device.

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45. An article of manufacture according to claim 44 wherein the computer readable code means in said article of manufacture comprise computer readable code means for responding to a third message from the first other network device for placing the call on hold with a fourth message accepting the hold.

46. An article of manufacture according to claim 44 comprising computer readable code means for sending a second message to the second other network device containing a reference to the first other network device so as to initiate setting up a connection for establishing the media path, wherein the first message and the second message contain a reference to a call between the first other network device and the second other network device.

47. An article of manufacture according to claim 44 wherein the computer readable code means in said article of manufacture comprises computer readable code means for sending a second message for terminating the call from the network device to the first other network device after establishing a media path with the second other network device.

48. An article of manufacture according to claim 44 wherein the computer readable code means in said article of manufacture comprises computer readable code means for re-establishing a media path with the first other network device set if attempts to establish a media path with the second other network device set fail.

49. An article of manufacture according to claim 44 wherein the network device is one of a telephone, a video phone, a PDA (Personal Digital Assistant), a soft phone, a wireless device, a wireless telephone, a cell phone, and a TTI (Thin Trunk Interface).

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50. An article of manufacture according to claim 44 wherein the network device is a VoIP (Voice over Internet Protocol) telephone.

51. An article of manufacture comprising:

5 a computer usable medium having computer readable program code means embodied therein for providing call transfer functionality at a network device, the computer readable code means in said article of manufacture comprising:

10 computer readable code means for participating in a call transfer of call between a first other network device and a second other network device by:

after receiving a first message from the second other network device initiating a connection between the  
15 network device and the second other network device, responding to a second message from the first other network device containing a reference to the second other network device by replacing the connection between the network device and the second other network device with an other  
20 connection between the network device and the first other network device.

52. An article of manufacture according to claim 51 wherein the second message contains a reference to the connection between the network device and the second other  
25 network device.

53. An article of manufacture according to claim 51 wherein the network device is one of a telephone, a video phone, a PDA (Personal Digital Assistant), a soft phone, a wireless device, a wireless telephone, a cell phone, and a  
30 TTI (Thin Trunk Interface).

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54. An article of manufacture according to claim 51 wherein the network device is a VoIP (Voice over Internet Protocol) telephone.

55. In a network device, a method comprising:

5 processing a call between the network device and a first other network device; and

responsive to receiving a user input requesting a call transfer to a second other network device, delivering call transfer functionality by:

10 a) initiating a connection from the network device to the second other network device; and

b) sending a message to the first other network device containing a reference to the second other network device.

15 56. In a network device, a method comprising:

processing a call between the network device and a first other network device; and

participating in a call transfer of the call by:

20 responding to a first message from the first other network device containing a reference to a second other network device by establishing a media path with the second other network device.

57. In a network device, a method comprising:

25 participating in a call transfer of call between a first other network device and a second other network device by:

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after receiving to a first message from the second other network device initiating a connection between the network device and the second other network device, responding to a second message from the first other network device containing a reference to the second other network device by replacing the connection between the network device and the second other network device with an other connection between the network device and the first other network device.

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